Gopher Tortoise-Burrow Excavation Guidelines

In areas where the water table is high, gopher tortoise burrows may be commonly 8 to 10 feet long and have an angle of decline of 4:1 to a depth of less than 3 feet. Where the water table is not a restriction, length has reached 67 feet with a depth of 21 feet.

A team of at least 3 experienced persons is desired for the excavation of each burrow: one to dig with shovel or machinery; one to scope and track the burrow tunnel utilizing PVC pipe or other tracer; and one to coordinate, hand-scoop and handle any occupants of the burrow (holder of FWC and/or Service permit).

Excavation may be done manually by shovel, if, for instance, burrows are shallow (high ground water table). Otherwise, excavation by backhoe is a common option. Any digging machinery must be equipped with a tooth-less bucket/digging blade for burrow excavation.

Digging should begin at the mouth of the burrow and carefully follow the tunnel path, as identified by the tracer, to the end chamber. If a backhoe is used, the bucket should remove soil by "dragging" along the path of the tunnel, rather than maximizing soil removal by "gouging".

The backhoe should be positioned behind the burrow mouth and scrape along the line of the tracer. The backhoe should not dig any closer than approximately 6 inches to the top of the tunnel, as soil should be removed at this point by hand, progressively, as the team works together towards the end chamber. Special attention should be exercised in navigating to the end chamber, as the tunnel frequently turns 20-30 degrees at its beginning. Soil removal in the end chamber should be by hand with attention to signs of occupancy.